



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

H.A.

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,632	02/05/2004	Dipl.-Ing. Daniel Supper	075791.0239	5649

5073 7590 10/11/2006

BAKER BOTTS L.L.P.  
2001 ROSS AVENUE  
SUITE 600  
DALLAS, TX 75201-2980

EXAMINER

ROJAS, OMAR R

ART UNIT PAPER NUMBER

2874

DATE MAILED: 10/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/772,632

Applicant(s)

SUPPER, DIPL.-ING. DANIEL

Examiner

Omar Rojas

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 20 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-14, 18 and 19 is/are rejected.
- 7) ☒ Claim(s) 2, 3 and 15-17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 06022006.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: Detailed Action.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see the remarks filed June 2, 2006, with respect to the rejection(s) of claim(s) 1-19 under 35 U.S.C. 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art references. See the detailed remarks below.

### ***Claim Objections***

2. Claim 10 is objected to because of the following informalities: Claim 10 recites the limitation "the ferrule is pushed onto the fiber at an end of the fiber which is remote from the end face" but lacks a clear antecedent basis for this limitation because it appears to refer to a ferrule different from that of base claim 7. Appropriate correction is required.

3. Claim 15 is objected to because of the following informalities: Claim 15 recites the limitation "the region of the passage hole" but lacks a clear antecedent basis for this limitation. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

6. Claim 9 recites the limitation "the ferrule is pushed into a region of the ferrule." This limitation is nonsensical and renders the claim indefinite.

Art Unit: 2874

7. Because the scope of claim 9 is indeterminable, it has not been examined for patentability purposes.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

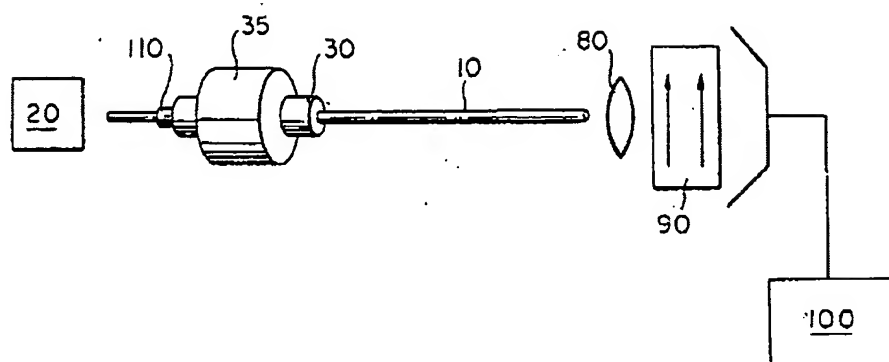
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**9. Claims 1, 4-8, 10-13, and 19 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Patent No. 4,673,244 to Miles.**

*In re* claim 1, Miles discloses a method for coupling a surface-oriented optoelectronic component 20/120 to an end face of an optical fiber 10, comprising:

arranging the fiber 10 at a holding point a predetermined distance from the end face in such a way that the end face can perform a rotating movement about the holding point; and bringing the end face of the fiber 10 and the component 20/120 close to one another in the context of a coarse adjustment in such a way that a fine adjustment is subsequently effected between the component and the fiber in the context of an automatic self-alignment by rotating the fiber about the holding point (column 4, lines 22-63 and column 5, lines 39-44). Note that the fiber alignment in Miles is considered automatic self-alignment because it is performed by a machine or computer (i.e., see Figure 3). Figure 2 of Miles is reproduced below.

**FIG. 2**

*In re* claims 4-8, 10-13, and 19, the recited limitations are shown or clearly suggested in view of Figures 2 and 4 of Miles which further show a housing 130/140, a strain relief device 110/150, and a coupling device 80/90/100 remote from a fiber endface.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

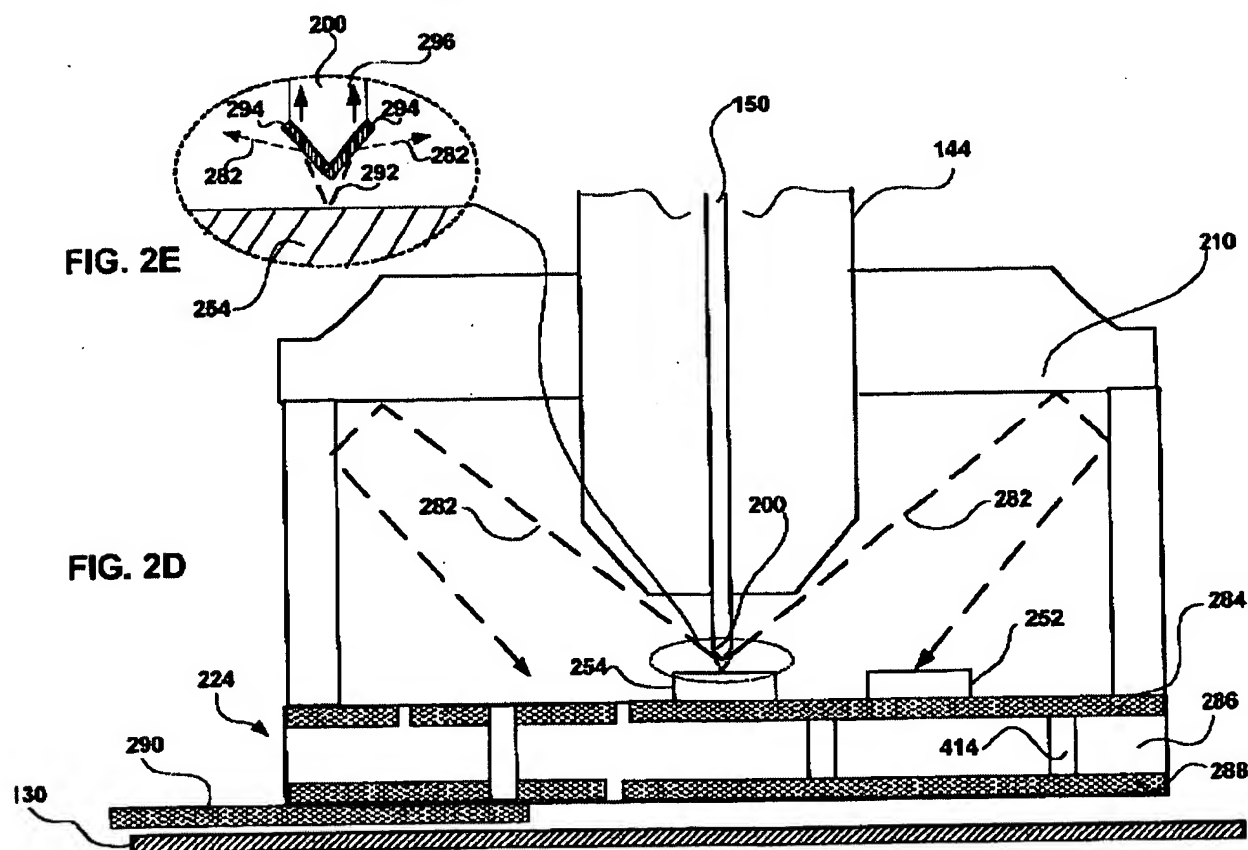
**11. Claims 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miles as applied to claim 4 above, and further in view of US 6,364,541 B1 to Nesnidal et al. ("Nesnidal").**

*In re* claims 14 and 18, the previous remarks concerning Miles are incorporated herein. Miles only differs from claims 14 and 18 in that Miles does not teach forming a passage hole in a carrier of the housing; fixing the component on a side of the carrier in such a way that the

Art Unit: 2874

optically active zone of the component faces the passage hole; directing the fiber through the passage hole; wherein the surface-oriented optoelectronic component comprises a VCSEL laser diode, an LED or a photodiode.

Nesnidal, on the other hand, teaches (i.e., Figure 2E) forming a passage hole in a carrier 210; fixing a component 254 on a side of the carrier 210 in such a way that the optically active zone of the component faces the passage hole; and directing a fiber 200 through the passage hole; wherein the surface-oriented optoelectronic component 254 comprises a VCSEL laser diode (column 5, lines 53-55). Figures 2D-2E of Nesnidal is reproduced below.



The motivation for combining Nesnidal with Miles is given in column 2, lines 30-35 by Nesnidal (i.e., low cost and reduced form factor). Therefore, it would have been obvious to one

Art Unit: 2874

of ordinary skill at the time of the claimed invention to obtain the invention specified by claims 14 and 18 in view of Miles combined with Nesnidal.

***Allowable Subject Matter***

12. Claims 2, 3, 15, and 16-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Regarding claims 2-3 and 16-17, the primary reason for allowance of the claims is the inclusion of the step of bringing close together the component and the fiber in such a way that the adhesive propagates between the end face of the fiber and the projecting structure, thereby bringing about a self-centering of the fiber relative to the component. Regarding claim 15, the primary reason for allowance of the claim is the inclusion of the step of electrically connecting electrical connections of the component to conductor tracks present on the carrier, wherein the electrical connections reside in a region associated with the passage hole and the conductor tracks project into the associated region.

***Conclusion***

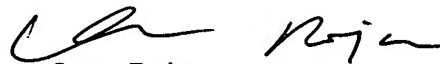
13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Patent No. 4,690,495 to Giannini also reads on at least claim 1 but is not being applied as prior art at this time. Applicant is advised that unforeseeable amendments to the claims may result in a Final Rejection of the claims in view of Giannini and/or in view of additional prior art yet to be cited.

Art Unit: 2874

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omar Rojas whose telephone number is (571) 272-2357. The examiner can normally be reached on Monday-Friday (12:00PM-8:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rod Bovernick, can be reached on (571) 272-2344. The official facsimile number for regular and After Final communications is (571) 273-8300. The examiner's RightFAX number is (571) 273-2357.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Omar Rojas  
Patent Examiner  
Art Unit 2874

or  
September 26, 2006

  
SUNG PAK  
PRIMARY EXAMINER